

Application No.: 10/626,635

Docket No.: 713-391A

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of making a plastics stretch film, said method comprising the steps of:

- a) taking a cast or blown film of plastic material;
- b) causing both plastic and elastic deformation of the film by stretching the film in two successive first and second stretching steps to form a stretched film, said first step having a stretch ratio higher than that of said second step to form a stretched film;
- c) relaxing said stretched film substantially to release all of the elastic deformation to form a substantially relaxed film; and
- d) winding said substantially relaxed film into a roll.

2. (currently amended) [[A]] The method of making a plastics stretch film as claimed in claim 1, wherein the temperature of said film is between 75°C and 90°C during said stretching steps.

3. (currently amended) [[A]] The method of making a plastics stretch film as claimed in claim 2, wherein the temperature of said film is substantially 80°C during said stretching steps.

4. (currently amended) [[A]] The method of making a plastics stretch film as claimed in claim 1, wherein the stretching of the film that occurs in said first step has a stretch ratio

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in the range 1:1.85 to 1:1.95.

5. (currently amended) ~~[[A]] The method of making a plastics stretch film as claimed in claim 1, wherein the stretching of the film that occurs in said second step has a stretch ratio in the range 1:1.70 to 1:1.80.~~

6. (currently amended) ~~[[A]] The method of making a plastics stretch film as claimed in claim [[1]] 4, wherein the stretching of the film that occurs in said first step has a stretch ratio in the range 1:1.85 to 1:1.95 and wherein the stretching of the film that occurs in said second step has a stretch ratio in the range 1:1.70 to 1:1.80.~~

7. (canceled)

8. (currently amended) ~~[[A]] The method of making a plastics stretch film as claimed in claim [[7]] 11, wherein the temperature of said film is between 75°C and 90°C during said stretching steps.~~

9-10. (canceled)

11. (currently amended) A method of making a plastics stretch film, said method comprising the steps of:

- a) taking a cast or blown film of plastic material;
- b) causing both plastic and elastic deformation of the film by stretching the film in two successive first and second stretching steps, said first step having a stretch ratio higher than that of said second step, wherein during said second step said film is traveling at a first speed; and
- c) relaxing said stretched film by winding said film into a roll at a speed of 0.85 times said first speed as claimed in claim 7, wherein the stretching of the film that occurs in said first step

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has a stretch ratio in the range 1:1.85 to 1:1.95.

12. (currently amended) ~~[[A]] The method of making a plastics stretch film as claimed in claim [[7]] 11,~~ wherein the stretching of the film that occurs in said second step has a stretch ratio in the range 1:1.70 to 1:1.80.

13. (canceled)

14. (currently amended) ~~[[A]] The method of making a plastics stretch film as claimed in claim 1,~~ wherein the stretching of the film that occurs in said two successive steps has a stretch ratio in a range from 1:1.5 to 1:2.5 for each step.

15. (currently amended) ~~[[A]] The method of making a plastics stretch film as claimed in claim 1,~~ wherein the plastic material is LLDPE.

16. (currently amended) ~~[[A]] The method of making a plastics stretch film as claimed in claim [[7]] 11,~~ wherein the plastic material is LLDPE.

17. (new) The method of claim 1, further comprising:

providing a plurality of rollers arranged successively between a film supply, from which said film is taken, and said roll;

passing said film from said film supply, successively through said rollers, to said roll at various speeds to perform said first and second stretching steps and said relaxing step, wherein said first and second stretching steps are performed between first and second pairs of successive said rollers, respectively; and

preventing a substantial necking down of the film being stretched by positioning the rollers of at least one of said first and second pairs sufficiently close to each other.

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18. (new) The method of claim 17, wherein the rollers of said first pair are physically spaced at 1 m or less and the rollers of said second pair are physically spaced at 1 m or less.

19. (new) The method of claim 17, wherein said first and second pairs share one common roller.

20. (new) The method of claim 1, further comprising
positioning a polishing roller upstream of said roll; and
polishing said relaxed film with said polishing roller prior to said winding, wherein said polishing comprises rotating said polishing roller in a direction opposite to that of the relaxed film being wound onto said roll.

21. (new) The method of claim 20, further comprising driving said roll by said polishing roller which is pressed against said roll.

22. (new) A method of making a plastics stretch film, said method comprising the steps of:

taking a cast or blown film of plastic material;

causing both plastic and elastic deformation of the film by stretching the film in two successive first and second stretching steps to form a stretched film, said first step having a stretch ratio higher than that of said second step;

relaxing said stretched film to form a substantially relaxed film; and

winding said substantially relaxed film into a roll;

said method further comprising:

providing a plurality of rollers arranged successively between a film supply, from which said film is taken, and said roll;

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passing said film from said film supply, successively through said rollers, to said roll at various speeds to perform said first and second stretching steps and said relaxing step, wherein said first and second stretching steps are performed between first and second pairs of successive said rollers, respectively; and

preventing a substantial necking down of the film being stretched by positioning the rollers of said first pair sufficiently close to each other and positioning the rollers of said second pair sufficiently close to each other;

wherein an upstream roller of said first pair is closer to a downstream roller of said first pair than to the rollers located upstream of said first pair; and

wherein a downstream roller of said second pair is closer to an upstream roller of said second pair than to the rollers located downstream of said third pair.

23. (new) The method of claim 22, wherein said first and second pairs share one common roller with the downstream roller of said first pair and the upstream roller of said second pair being one and the same.

24. (new) The method of claim 22, wherein one of said roller is a polishing roller positioned upstream of said roll and downstream of said second pair;

said method further comprising polishing said relaxed film prior to said winding by rotating said polishing roller in a direction opposite to that of the relaxed film being wound onto said roll.